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Mail Stop Amendment
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Alexandria, VA 22313-1450
On
TOWNSEND and TOWNSEND and CREW LLP

Attorney Docket No.: 021819-000130US Client Ref. No. JUV2879.54-3

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Steven W. Dow, et al.

Application No.: 10/780,114

Filed: February 17, 2004

For: SYSTEMIC IMMUNE ACTIVATION METHOD USING NUCLEIC ACID-LIPID COMPLEXES

Customer No.: 20350

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Confirmation No.: 8036

Examiner: Anne Marie Sabrina Wehbe

Art Unit: 1633

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER

37 CFR §1.97 and §1.98

Sir:

The references cited on attached forms PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of references BV-BZ and CS-DJ are enclosed. In accordance with 37 CFR §1.98(d), copies of references BO-BQ, BT-BU and CA-CR can be found in Application No. 09/104,759, filed June 25, 1998, now issued U.S. Patent No. 6,693,086 (Attorney Docket No. 021819-000100US).

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It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that <u>no fee is required</u> for submission of this statement, because this submission is prior to the issuance of a first Office Action on the merits.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Karen B. Dow Reg. No. 29,684

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, Eighth Floor San Francisco, California 94111-3834

Tel: 858-350-6100 Fax: 415-576-0300

KBD:tsp 60913832 v1 Substitute for form 1449A/PTO INFORMATION DISCLO

## STATEMENT BY APPLICANT

(Use as many sheets as necessary) 1 6

Sheet

Complete if Known					
Application Number	10/780,114				
Filing Date	February 17, 2004				
First Named Inventor	Dow, Steve W.				
Art Unit	1633				
Examiner Name	Anne Marie Sabrina Wehbe				
Attorney Docket Number	021819-000130US				

Examiner	Cite	Document Number	U.S. PATENT DO  Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Initials*	No.1	Number Kind Code <sup>2 (# known)</sup>	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
	AA	US-4,957,735	09/18/1990	Huang	
	AB	US-5,013,556	05/07/1991	Woodle, et al.	
	AC	US-5,043,164	08/27/1991	Huang, et al.	
	AD	US-5,399,346	03/21/1995	Anderson, et al.	
	AE	US-5,580,859	12/03/1996	Felgner, et al.	
	AF	US-5,589,466	12/31/1996	Felgner, et al.	
	AG	US-5,593,972	01/41/1997	Weiner, et al.	•
	АН	US-5,641,662	06/24/1997	Debs, et al.	
	AI	US-5,643,578	07/01/1997	Robinson, et al.	
	AJ	US-5,663,153	09/02/1997	Hutcherson, et al.	
	AK	US-5,676,954	10/14/1997	Brigham	
,	AL	US-5,679,647	10/21/1997	Carson, et al.	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	AM	US-5,686,101	11/11/1997	Tagawa, et al.	
*******************************	AN	US-5,693,622	12/02/1997	Wolff, et al.	
	AO	US-5,703,055	12/30/1997	Felgner, et al.	
	AP	US-5,703,057	12/30/1997	Johnston et al.	
	AQ	US-5,705,187	01/06/1998	Unger	
······································	AR	US-5,705,385	01/06/1998	Bally, et al.	
	AS	US-5,723,335	03/03/1998	Hutcherson, et al.	
	AT	US-5,817,856	10/06/1998	Tirosh, et al.	
**************************************	AU	US-5,820,873	10/13/1998	Choi, et al.	
	AV	US-5,827,703	10/27/1998	Debs, et al.	
	AW	US-5,830,878	11/03/1998	Gorman, et al.	•
······	AX	US-5,976,567	11/02/1999	Wheeler, et al.	
·····	AY	US-5,981,501	11/09/1999	Wheeler, et al.	
	AZ	US-6,121,247	09/19/2000 ′	Huang, et al.	
	ВА	US-6,194,388 B1	02/27/2001	Krieg, et al.	
	B8	US-6,207,646 B1	03/27/2001	Krieg, et al.	
······································	ВС	US-6,224,901 B1	05/01/2001	Li, et al.	
	BD	US-6,239,116 B1	05/29/2001	Krieg, et al.	
	BE	US-6,287,591 B1	09/11/2001	Semple, et al.	
	BF	US-6,339,068 B1	01/15/2002	Krieg, et al.	
	BG	US-6,406,705 B1	06/18/2002	Davis, et al.	
·····	вн	US-6,534,484 B1	03/18/2003	Wheeler, et al.	
***************************************	Ві	US-6,589,940	07/2003	Raz, et al.	

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Subs	Substitute for form 1449A/PTO			Complete if Known		
				Application Number	10/780,114	
IN	FORMATION DISC	CLO	SURE	Filing Date	February 17, 2004	
SI	STATEMENT BY APPLICANT			First Named Inventor	Dow, Steve W.	
				Art Unit	1633	
	(Use as many sheets as necessary)			Examiner Name	Anne Marie Sabrina Wehbe	
Sheet	2	of	6	Attorney Docket Number	021819-000130US	

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number Kind Code <sup>2 (F known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	BJ	US-6,627,615 B1	09/30/2003	Debs, et al.				
<del></del>	ВК	US-US2002/0110586 A1	08/15/2002	Madden, et al.				
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	BL	US-US2002/0119990 A1	08/29/2002	Madden, et al.				
****	ВМ	US-US2003/0082228 A1	05/01/2003	Flowers, et al.	***************************************			
	BN	US-						

	FOREIGN PATENT DOCUMENTS									
Examiner		Foreign Patent Document			Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages			
Initials*	No.¹	Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	MM-DD-YYYY	MM-DD-YYYY Applicant	Applicant of Cited Document	or Relevant Figures Appear	T⁵
	во	PCT	WO94/04196	A1	03/03/1994	Imperial Cancer Research Technology Limited				
,	ВР	PCT	WO93/25673	A1	12/23/1993	The Regents of the University of California				
·	BQ	EP	0819758	A2	01/21/1998	James Archibald Mixson				
	BR					•				
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Substitute	for form 1449B/PTC	) ,		Complete if Known		
				Application Number	10/780,114	
INFO	RMATION	DISCLOS	SURE	Filing Date	February 17, 2004	
STA <sup>*</sup>	STATEMENT BY APPLICANT			First Named Inventor	Dow, Steve W.	
				Art Unit	1633	
	(Use as many shee	ets as necessary)		Examiner Name	Anne Marie Sabrina. Wehbe	
Sheet	3	of	6	Attorney Docket Number	021819-000130US	

NON PATENT LITERATURE DOCUMENTS								
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Γ2					
	вт	VERMA, Inder M., et al. "Gene Therapy - promises, problems and prospects", <i>Nature</i> (1997) 389:239-242						
	BU	ORKIN, Stuart H., et al. "Report and Recommendation of the Panel to Assess the NIH Investment in Research on Gene Therapy", (1995) 1-41						
	BV	RAZ, E., et al. "Cationic Lipids Inhibit Intradermal Genetic Vaccination", <i>Vaccines</i> (1994) 94:71-75						
	BW	GAO, Xiang "Cationic Lipid-Based Gene Delivery: An Update", (undated) pp 99-112						
•••••••	вх	RODMAN, David M., et al. "Delivery of Genes Through the Lung Circulation", (undated) Chapter 9, pp. 181-191						
••••••••••••	BY	FREIMARK, Bruce D., et al. "Cationic Lipids Enhance Cytokine and Cell Influx Levels in the Lung Following Administration of Plasmid: Cationic Lipid Complexes", <i>J. Immunology</i> (1998) 160:4580-4586						
	BZ	YAMAMOTO, Toshiko, et al. "Lipofection of Synthetic Oligodeoxyribonucleotide Having a Palindromic Sequence of AACGTT to Murine Splenocytes Enhances Interferon Production and Natural Killer Activity", <i>Microbiol. Immunol.</i> (1994) 38(10):831-836						
	СА	BALLAS, Zuhair K., et al. "Induction of NK Activity in Murine and Human Cells by CpG Motifs in Oligodeoxynucleotides and Bacterial DNA", <i>Journal of Immunology</i> (1996) 157:1840-1845						
***************************************	СВ	KRIEG, Arthur M. "Lymphocyte activation by CpG dinucleotide motifs in prokaryotic DNA", Trends in Microbiology (1996) 4(2):73-77						
	СС	PISETSKY, David S. "The Immunologic Properties of DNA", <i>The Journal of Immunology</i> (1996) 156:421-423						
	CD	SATO, Yukio, et al. "Immunostimulatory DNA Sequences Necessary for Effective Intradermal Gene Immunization", Science (1996) 273:352-354						
	CE	STACEY, Katryn J., et al. "Macrophages Ingest and Are Activated by Bacterial DNA", <i>The Journal of Immunology</i> (1996) 157:2116-2122						
Examiner Signature		Date Considered						

EXAMINER: Initial if reference considered, whether or not citation is In conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

Substitute	e for form 1449B/PTO		<u> </u>	Complete if Known		
				Application Number	10/780,114	
INFO	RMATION	DISCLOS	URE	Filing Date	February 17, 2004	
STA	TEMENT B'	Y APPLIC	ANT	First Named Inventor	Dow, Steve W.	
				Art Unit	1633	
	(Use as many shee	ts as necessary)		Examiner Name	Anne Marie Sabrina. Wehbe	
Sheet	4	of	6	Attorney Docket Number	021819-000130US	

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Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the ar magazine, journal, serial, symposium, catalog, etc.), date, page and/or country where pub	e(s), volume-iss	ropriate), title of the item (book, ue number(s), publisher, city	T²		
	CF	SUN, Siquan, et al. "Dual Function of Drosophila Cells Implications for Tumor Immunotherapy", <i>Immunity</i> (19	s as APCs fo 196) 4:555-56	r Native CD8 <sup>+</sup> TCells: 4			
	CG	LIU, Yong, et al. "Factors influencing the efficiency of intravenous gene delivery", <i>Nature Biotechnology</i> (19	cationic lipos 97) 15:167-1	ome-mediated 73			
••••••	СН	LEITNER, Wolfgang W., et al. "DNA and RNA-based vaccines: principles, progress and prospects" <i>Vaccine</i> (2000) 18:765-777					
	CI	LESOON-WOOD, Leslie A., et al. "Systemic Gene Therapy with p53 Reduces Growth and Metastases of a Malignant Human Breast Cancer in Nude Mice", "Human Gene Therapy (1995) 6:395-405					
	CJ	OKAMOTO, T., et al. <i>Proceedings of the American As</i> 38: Abstract #78	ssociation for	Cancer Research (1997)			
	СК	LI, Xiu-Min, et al. "Mucosal IFN-λ Gene Transfer Inhib Mice", <i>The Journal of Immunology</i> (1996) 157:3216-3	its Pulmonar 219	y Allergic Responses in			
•	CL	McLEAN, John W., et al. "Organ-specific endothelial cell uptake of cationic liposome-DNA complexes in mice", <i>American Journal of Physiology</i> (1997) 273:H3878-H404					
•••••	СМ	PISETSKY, David S. "Immune Activation by Bacterial (1996) 5:303-310	DNA: A New	Genetic Code", Immunity			
	CN	ROMAN, Mark, et al. "Immunostimulatory DNA sequences function as T helper -1- promoti adjuvants", <i>Nature Medicine</i> (1997) 3(8):849-854					
	со	ROSENBERG, Steven A., et al. "Regression of Established Pulmonary Metastases and Subcutaneous Tumor Mediated by the Systemic Administration of High-docse Recombinant Interleukin 2", <i>J. Exp. Med.</i> (1985) 161:1169-1188					
	СР	SCHEULE, Ronald K., et al. "Basis of Pulmonary Toxicity Associated with Cationic Lipid-Mediated Gene Transfer to the Mammalian Lung", <i>Human Gene Therapy</i> (1997) 8:689-707					
	co	TEMPLETON, Nancy S., et al. "Improved DNA: liposo delivery and gene expression", Nature Biotechnology	me complex (1997) 15:64	es for increased systemic 17-652			
Examiner Signature			Date Considered				

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFO	RMATION	DISCLOS	SURE	Filing Date	February 17, 2004	
STA	TEMENT B	Y APPLIC	CANT	First Named Inventor	Dow, Steve W.	
				Art Unit	1633	
	(Use as many shee	ets as necessary)		Examiner Name	Anne Marie Sabrina. Wehbe	
Sheet	5	of	6	Attorney Docket Number	021819-000130US	

NON PATENT LITERATURE DOCUMENTS								
Examiner Initials *	Cite No.1							
	CR	GREGORIADIS, Gregory, et al. "Liposome-mediated DNA vaccination", FEBS Letters (1997) 402:107-110						
	cs	NAITOH, J., et al. <i>Proceedings of the American Association for Cancer Research</i> (1998) 39: Abstract #2421						
	СТ	HO, Rodney J.Y., et al. "Interactions of Target-sensitive Immunoliposomes with Herpes Simplex Virus", <i>Journal of Biological Chemistry</i> (1987) 262(29):13979-13984	]					
***************************************	CU	HO, Rodney J.Y., et al. "Target-sensitive Immunoliposomes as an Efficient Drug Carrier for Antiviral Activity", <i>Journal of Biological Chemistry</i> (1987) 262(29):13973-13978	]					
• • • • • • • • • • • • • • • • • • • •	cv	HO, Rodney J.Y., et al. "Target-sensitive Immunoliposomes: Preparation and Characterization", <i>Biochemistry</i> (1986) 25:5500-5506	]					
***************************************	cw	ALLEN, T.M., et al. "Large unilamellar liposomes with low uptake into the reticuloendothelial system", <i>FEBS Letters</i> (1987) 223(1):42-46	]					
····	сх	KLIBANOV, Alexander L. "Amphipathic polyethyleneglycols effectively prolong the circulation time of liposomes", <i>FEBS Letters</i> (1990) 268(1):235-237	]					
	CY	WOODLE, Martin C., et al. "Sterically stabilized liposomes", <i>Biochimica et Biophysica Acta</i> (1992) 1113:171-199						
***************************************	cz	CORNELIE, S., et al. "Methylated cpG-Containing Plasmid Activates the Immune System", Scandinavian Journal of Immunology (2004) 59:143-151						
	DA	DA SASAKI, Shin, et al. "Adjuvant formulations and delivery systems for DNA vaccines",  Methods (2003) 31:243-254						
	DB	C.J. WHEELER, et al. "A novel cationic lipid greatly enhances plasmid DNA delivery and expression in mouse lung", <i>Proc. Natl. Acad. Sci. USA</i> (1996) 93:11454-11459						
	DC	DC LIU, Y, et al. "Cationic Liposome-mediated intravenous Gene Delivery", J. Biol. Chem. (1995) 270(42):24864-24870						
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	DD	ZOU, Yiyu, et al. "Effective Treatment of Early Endobronchial Cancer With Regional Administration of Liposome-p53 Complexes", <i>J. Natl. Cancer. Inst.</i> (1998) 90(15):1130-1137				
	DE	OUDRHIRI, Noufissa, et al. "Gene transfer by guanidinium-cholesterol cationic lipids into airway epithelial cells <i>in vitr</i> o and <i>in vivo</i> ", <i>Proc. Natl. Acad. Sci. USA</i> (1997) 94:1651-1656				
	DF	STRIBLING, Roscoe, et al. "Aerosol gene delivery <i>in vivo", Proc. natl. Acad. Sci. USA</i> (1992) 89:11277-11281				
	DG	NABEL, Gary.J., et al. "Direct gene transfer with DNA-liposome complexes in melanoma: Expression, biologic activity, and lack of toxicity in humans", <i>Proc. Natl. Acad. Sci. USA</i> (1993) 90:11370-11311				
	DH	LI, Daqing, et al. "Combination Surgery and Nonviral Interleukin 2 Gene Therapy for Head and Neck Cancer", Clinical Cancer Research (1999) 5:1551-1556				
	DI	PHILIP, Ramila, et al. "In Vivo Gene Delivery", J. Biol. Chem. (1993) 268(22):16087-16090				
	DJ	HIROAKI, Hemmi, et al. Nature Immunology (2002) 3(2): 196-200				
	DK					

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